

CLAIMS

We claim:

1. A method of doing business comprising the steps of:
 - 5 distorting a digital representation of one or more biometrics of a user to create a distorted biometric using one or more transformations, at least one of the transformations comprising one or more non-invertible functions; and
 - 10 comparing, in response to a transaction, the distorted biometric with one or more stored distorted biometrics, so that the distorted biometric represents a user without revealing the digital representation of the one or more biometrics.
2. A method, as in claim 1, where the biometric is a physical characteristic.
3. A method, as in claim 1, where the biometric is a behavioral characteristic.
 - 15 4. A method, as in claim 1, where the biometric includes any one or more of the following: one or more fingerprints, one or more minutiae, a voice pattern, a facial image, an iris, a hand signature, a auditory signature, a gesture, and a gait.
- 20 5. A method, as in claim 1, where the transaction is for one or more of the following: use of a financial instrument, providing a service, executing a contract, a sale, a bid, a submitted account number, an authorization, an identification, a reservation request, a purchase, a quote, an access to a physical structure, an access to a financial account, an authority to manipulate a financial account, an access to a database, an access to information, a request for a privilege, a
 - 25 request for a network service, an offer for a network service, an auction, and an enrollment.
6. A method, as in claim 1, where the distorted biometric is used to authenticate the user.

7. A method, as in claim 1, where the user is any one or more of the following: a customer, a customer submitting an order on a network, a client, an employee, a user of a service, and a purchaser of a product.

5 8. A method, as in claim 1, being performed by any one or more of the following: the user, a company, a service company, a company selling products, a bank, a computer, and a credit card company.

9. A method of doing business comprising the steps of:

10 receiving one or more distorted biometrics associated with a user identifier, wherein said one or more distorted biometrics were created using one or more transformations of a digital representation of one or more biometrics of a user, at least one of the transformations comprising one or more non-invertible functions;

15 storing a plurality of records in one or more databases, each record having one or more distorted biometrics and a user identifier; and

receiving one or more requests from a requester, the one or more requests containing one or more target distorted biometrics associated with a target identifier;

comparing the one or more requests with one or more of the records; and

20 providing the requester with an indication that the target distorted biometric and the target identifier matched one or more of the respective one or more distorted biometrics and associated user identifiers.

10. A method, as in claim 9, further comprising the step of storing a distortion transform used to create the distorted biometric from the digital representation of the one or more biometrics of the user.

25 11. A method, as in claim 9, where the distorted biometric can not be inverted to a digital representation of the biometric from which the distorted biometric was created.

12. A method, as in claim 9, where the distorted biometric is canceled by allowing a user to replace the distorted biometric with a second distorted biometric.

13. A method, as in claim 12, where the second distorted biometric is created by a
5 second distortion transform that is different than a first distortion transform used to create the distorted biometric.

14. A method, as in claim 9, where the requester is any one or more of the following:
a financial company, a bank, a brokerage, a credit card company, and a merchant.

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15. A method of granting authorization of a transaction, the method comprising the steps of:

receiving a user identifier, a distorted biometric and a transaction request, wherein said distorted biometric was created using one or more transformations of a digital representation
15 of one or more biometrics of a user, at least one of the transformations comprising one or more non-invertible functions;

checking the user identifier with information about one or more accounts of the user;

20 verifying the identity of the user by comparing the received user identifier with a stored user identifier and comparing the received distorted biometric with a stored distorted biometric associated with the stored user identifier; and

granting authorization for the transaction request if the information about the account is in good standing and the distorted biometric is associated with the user, wherein said distorted biometric was created using the one or more transformations.

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16. A method, as in claim 15, where the identity of the user is verified by receiving an acknowledgment from a remote computer that the user identifier is associated with the digital representation of the distorted biometric.

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17. A method of doing business comprising the steps of:
sending a user identifier and an associated digital representation of a user biometric to a remote computer that distorts the digital representation of the user biometric to a distorted biometric using one or more transformations, at least one of the transformations
5 comprising one or more non-invertible functions;
sending the user identifier and a transaction request to a financial company;
determining that the user identifier is associated with the distorted biometric and sending an acknowledgment to the financial company; and
receiving an authorization for the transaction request from the financial company
10 if the acknowledgment is sent and the user identifier is associated with a account in good standing.

18. A method of doing business comprising the steps of:
sending a transaction request, a user identifier, and a distorted biometric
15 determined using one or more transformations that transform a digital representation of one or more biometrics of a user to the distorted biometric, at least one of the transformations comprising at least one non-invertible function; and
receiving an authorization for a transaction defined by the transaction request.